SEQUENCE LISTING

<110> Koide, Shohei

<120> ARTIFICIAL ANTIBODY POLYPEPTIDES

<130> 109.050US1

<150> US 60/217,474
<151> 2000-07-11

<160> 121

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 14
<212> PRT
<213> Unknown

<220>
<223> Anti-hen egg lysozyme (HEL) antibody.

<400> 1
Ala Arg Glu Arg Asp Tyr Arg Leu Asp Tyr Trp Gly Gln Gly
 1   5   10

<210> 2
<211> 17
<212> PRT
<213> Unknown

<220>
<223> An anti-HEL single VH domain termed VH8.

<400> 2
Ala Arg Gly Ala Val Val Ser Tyr Tyr Ala Met Asp Tyr Trp Gly Gln
 1   5   10   15
Gly

<210> 3
<211> 16
<212> PRT
<213> Homo sapiens

<400> 3
Tyr Ala Val Thr Gly Arg Gly Asp Ser Pro Ala Ser Ser Lys Pro Ile
 1   5   10   15

<210> 4
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutant D1.3-1.

<400> 4

```
Tyr Ala Glu Arg Asp Tyr Arg Leu Asp Tyr Pro Ile
 1               5                   10
```

```
<210> 5
<211> 12
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<213> Artificial Sequence

<220>
<223> Mutant D1.3-2.

<400> 5
```
```
Tyr Ala Val Arg Asp Tyr Arg Leu Asp Tyr Pro Ile
 1               5                   10
```

```
<210> 6
<211> 16
<212> PRT
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<220>
<223> Mutant D1.3-3.

<400> 6
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```
Tyr Ala Val Arg Asp Tyr Arg Leu Asp Tyr Ala Ser Ser Lys Pro Ile
 1               5                   10                  15
```

```
<210> 7
<211> 13
<212> PRT
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<220>
<223> Mutant D1.3-4.

<400> 7
```
```
Tyr Ala Val Arg Asp Tyr Arg Leu Asp Tyr Lys Pro Ile
 1               5                   10
```

```
<210> 8
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutant D1.3-5.

<400> 8
```
```
Tyr Ala Val Arg Asp Tyr Arg Ser Lys Pro Ile
 1               5                   10
```

```
<210> 9
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutant D1.3-6.
```

<400> 9
Tyr Ala Val Thr Arg Asp Tyr Arg Leu Ser Ser Lys Pro Ile
1   5   10

<210> 10
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutant D1.3-7.

<400> 10
Tyr Ala Val Thr Glu Arg Asp Tyr Arg Leu Ser Ser Lys Pro Ile
1   5   10   15

<210> 11
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutant VH8-1.

<400> 11
Tyr Ala Val Ala Val Val Ser Tyr Tyr Ala Met Asp Tyr Pro Ile
1   5   10   15

<210> 12
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Mutant VH8-2.

<400> 12
Tyr Ala Val Thr Ala Val Val Ser Tyr Tyr Ala Ser Ser Lys Pro Ile
1   5   10   15

<210> 13
<211> 59
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN1F.

<400> 13
cgggatccca tatgcaggtt tctgatgttc cgcgtgacct ggaagttgtt gctgcgacc   59

<210> 14
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN1R.

3

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<400> 14
taactgcagg agcatcccag ctgatcagca ggctagtcgg ggtcgcagca acaac          55


<210> 15
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN2F.

<400> 15
ctcctgcagt taccgtgcgt tattaccgta tcacgtacgg tgaaaccggt g             51


<210> 16
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN2R.

<400> 16
gtgaattcct gaaccgggga gttaccaccg gtttcaccg                           39


<210> 17
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN3F.

<400> 17
aggaattcac tgtacctggt tccaagtcta ctgctaccat cagcgg                   46


<210> 18
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN3R.

<400> 18
gtatagtcga cacccggttt caggccgctg atggtagc                            38


<210> 19
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN4F.

<400> 19
cgggtgtcga ctataccatc actgtatacg ct                                  32
```

4

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<210> 20
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN4R.

<400> 20
cgggatccga gctcgctggg ctgtcaccac ggccagtaac agcgtataca gtgat          55


<210> 21
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN5F.

<400> 21
cagcgagctc caagccaatc tcgattaact accgt                                35


<210> 22
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN5R.

<400> 22
cgggatcctc gagttactag gtacggtagt taatcga                              37


<210> 23
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FN5R'.

<400> 23
cgggatccac gcgtgccacc ggtacggtag ttaatcga                             38


<210> 24
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide gene3F.

<400> 24
cgggatccac gcgtccattc gtttgtgaat atcaaggcca atcg                      44


<210> 25
<211> 39
<212> DNA
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<213> Artificial Sequence

<220>
<223> Oligonucleotide gene3R.

<400> 25
ccggaagctt taagactcct tattacgcag tatgttagc   39

<210> 26
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide 38TAABg1II.

<400> 26
ctgttactgg ccgtgagatc taaccagcga gctcca   36

<210> 27
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide BC3.

<221> misc_feature
<222> (1)...(51)
<223> n = A,T,C or G

<400> 27
gatcagctgg gatgctcctn nknnknnknn knnktattac cgtatcacgt a   51

<210> 28
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FG2.

<221> misc_feature
<222> (1)...(57)
<223> n = A,T,C or G

<400> 28
tgtatacgct gttactggcn nknnknnknn knnknnknnk tccaagccaa tctcgat   57

<210> 29
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FG3.

<221> misc_feature

<222> (1)...(47)
<223> n = A,T,C or G

<400> 29
ctgtatacgc tgttactggc nnknnknnkn nkccagcgag ctccaag   47

<210> 30
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide FG4.

<221> misc_feature
<222> (1)...(51)
<223> n = A,T,C or G

<400> 30
catcactgta tacgctgtta ctnnknnknn knnknnktcc aagccaatct c   51

<210> 31
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of ubiquitin-binding
      monobody clone 211.

<400> 31
Cys Ala Arg Arg Ala
 1   5

<210> 32
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of ubiquitin-binding
      monobody clone 211.

<400> 32
Arg Trp Ile Pro Leu Ala Lys
 1   5

<210> 33
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of ubiquitin-binding
      monobody clone 212.

<400> 33
Cys Trp Arg Arg Ala

```
<210> 34
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of ubiquitin-binding
      monobody clone 212.

<400> 34
Arg Trp Val Gly Leu Ala Trp
 1               5


<210> 35
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of ubiquitin-binding
      monobody clone 213.

<400> 35
Cys Lys His Arg Arg
 1               5


<210> 36
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of ubiquitin-binding
      monobody clone 213.

<400> 36
Phe Ala Asp Leu Trp Trp Arg
 1               5


<210> 37
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of ubiquitin-binding
      monobody clone 214.

<400> 37
Cys Arg Arg Gly Arg
 1               5


<210> 38
<211> 7
<212> PRT
<213> Artificial Sequence
```

<220>
<223> The sequence of the FG loop of ubiquitin-binding
      monobody clone 214.

<400> 38
Arg Gly Phe Met Trp Leu Ser
 1   5

<210> 39
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of ubiquitin-binding
      monobody clone 215.

<400> 39
Cys Asn Trp Arg Arg
 1   5

<210> 40
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of ubiquitin-binding
      monobody clone 215.

<400> 40
Arg Ala Tyr Arg Tyr Arg Trp
 1   5

<210> 41
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of ubiquitin-binding
      monobody clone 411.

<400> 41
Ser Arg Leu Arg Arg
 1   5

<210> 42
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of ubiquitin-binding
      monobody clone 411.

<400> 42
Pro Pro Trp Arg Val

<210> 43
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of ubiquitin-binding
      monobody clone 422.

<400> 43
Ala Arg Trp Thr Leu
 1   5

<210> 44
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of ubiquitin-binding
      monobody clone 422.

<400> 44
Arg Arg Trp Trp Trp
 1   5

<210> 45
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of ubiquitin-binding
      monobody clone 424.

<400> 45
Gly Gln Arg Thr Phe
 1   5

<210> 46
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of ubiquitin-binding
      monobody clone 424.

<400> 46
Arg Arg Trp Trp Ala
 1   5

<210> 47
<211> 5
<212> PRT
<213> Unknown

```
<220>
<223> The sequence of the BC loop of WT from library #2.

<400> 47
Ala Val Thr Val Arg
 1               5


<210> 48
<211> 7
<212> PRT
<213> Unknown

<220>
<223> The sequence of the FG loop of WT from library #2.

<400> 48
Arg Gly Asp Ser Pro Ala Ser
 1               5


<210> 49
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.1.

<400> 49
Cys Asn Trp Arg Arg
 1               5


<210> 50
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.1.

<400> 50
Arg Ala Tyr Arg Tyr Arg Trp
 1               5


<210> 51
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.2.

<400> 51
Cys Met Trp Arg Ala
 1               5


<210> 52
<211> 7
<212> PRT
```

<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.2.

<400> 52
Arg Trp Gly Met Leu Arg Arg
 1   5

<210> 53
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.3.

<400> 53
Ala Arg Met Arg Glu
 1   5

<210> 54
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.3.

<400> 54
Arg Trp Leu Arg Gly Arg Tyr
 1   5

<210> 55
<211> 5
<212> PRT
<213> QArtificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.4.

<400> 55
Cys Ala Arg Arg Arg
 1   5

<210> 56
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.4.

<400> 56
Arg Arg Ala Gly Trp Gly Trp
 1   5

<210> 57

12

```
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.5.

<400> 57
Cys Asn Trp Arg Arg
 1               5


<210> 58
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.5.

<400> 58
Arg Ala Tyr Arg Tyr Arg Trp
 1               5


<210> 59
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.6.

<400> 59
Arg Trp Arg Glu Arg
 1               5


<210> 60
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.6.

<400> 60
Arg His Pro Trp Thr Glu Arg
 1               5


<210> 61
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.7.

<400> 61
Cys Asn Trp Arg Arg
 1               5
```

```
<210> 62
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.7.

<400> 62
Arg Ala Tyr Arg Tyr Arg Trp
 1               5


<210> 63
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.8.

<400> 63
Glu Arg Arg Val Pro
 1               5


<210> 64
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.8.

<400> 64
Arg Leu Leu Leu Trp Gln Arg
 1               5


<210> 65
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.9.

<400> 65
Gly Arg Gly Ala Gly
 1               5


<210> 66
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.9.

<400> 66
Phe Gly Ser Phe Glu Arg Arg
```

<210> 67
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.11.

<400> 67
Cys Arg Trp Thr Arg
 1   5

<210> 68
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.11.

<400> 68
Arg Arg Trp Phe Asp Gly Ala
 1   5

<210> 69
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB24.12.

<400> 69
Cys Asn Trp Arg Arg
 1   5

<210> 70
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB24.12.

<400> 70
Arg Ala Tyr Arg Tyr Arg Trp
 1   5

<210> 71
<211> 5
<212> PRT
<213> Unknown

<220>
<223> The sequence of the BC loop of WT from library #4.

```
<400> 71
Ala Val Thr Val Arg
 1               5


<210> 72
<211> 5
<212> PRT
<213> Unknown

<220>
<223> The sequence of the FG loop of WT from library #4.

<400> 72
Gly Arg Gly Asp Ser
 1               5


<210> 73
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB25.1.

<400> 73
Gly Gln Arg Thr Phe
 1               5


<210> 74
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB25.1.

<400> 74
Arg Arg Trp Trp Ala
 1               5


<210> 75
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB25.2.

<400> 75
Gly Gln Arg Thr Phe
 1               5


<210> 76
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
```

<223> The sequence of the FG loop of clone pLB25.2.

<400> 76
Arg Arg Trp Trp Ala
 1   5

<210> 77
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB25.3.

<400> 77
Gly Gln Arg Thr Phe
 1   5

<210> 78
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB25.3.

<400> 78
Arg Arg Trp Trp Ala
 1   5

<210> 79
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB25.4.

<400> 79
Leu Arg Tyr Arg Ser
 1   5

<210> 80
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB25.4.

<400> 80
Gly Trp Arg Trp Arg
 1   5

<210> 81
<211> 5
<212> PRT
<213> Artificial Sequence

17

<220>
<223> The sequence of the BC loop of clone pLB25.5.

<400> 81
Gly Gln Arg Thr Phe
 1   5

<210> 82
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB25.5.

<400> 82
Arg Arg Trp Trp Ala
 1   5

<210> 83
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB25.6.

<400> 83
Gly Gln Arg Thr Phe
 1   5

<210> 84
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB25.6.

<400> 84
Arg Arg Trp Trp Ala
 1   5

<210> 85
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB25.7.

<400> 85
Leu Arg Tyr Arg Ser
 1   5

<210> 86
<211> 5
<212> PRT

<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB25.7.

<400> 86
Gly Trp Arg Trp Arg
 1   5

<210> 87
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB25.9.

<400> 87
Leu Arg Tyr Arg Ser
 1   5

<210> 88
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB25.9.

<400> 88
Gly Trp Arg Trp Arg
 1   5

<210> 89
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB25.11.

<400> 89
Gly Gln Arg Thr Phe
 1   5

<210> 90
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB25.11.

<400> 90
Arg Arg Trp Trp Ala
 1   5

<210> 91

```
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone pLB25.12.

<400> 91
Leu Arg Tyr Arg Ser
 1               5


<210> 92
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone pLB25.12.

<400> 92
Gly Trp Arg Trp Arg
 1               5


<210> 93
<211> 15
<212> DNA
<213> Unknown

<220>
<223> The sequence of the BC loop of WT from Table 7.

<400> 93
gcagttaccg tgcgt                                                    15


<210> 94
<211> 5
<212> PRT
<213> Unknown

<220>
<223> The sequence of the BC loop of WT from Table 7.

<400> 94
Ala Val Thr Val Arg
 1               5


<210> 95
<211> 24
<212> DNA
<213> Unknown

<220>
<223> The sequence of the FG loop of WT from Table 7.

<400> 95
ggccgtggtg acagcccagc gagc                                          24


<210> 96
```

```
<211> 8
<212> PRT
<213> Unknown

<220>
<223> The sequence of the FG loop of WT from Table 7.

<400> 96
Gly Arg Gly Asp Ser Pro Ala Ser
 1               5

<210> 97
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone 1 from Table
      7.

<400> 97
tcgaggttgc ggcgg                                                    15

<210> 98
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone 1 from Table
      7.

<400> 98
Ser Arg Leu Arg Arg
 1               5

<210> 99
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone 1 from Table
      7.

<400> 99
ccgccgtgga gggtg                                                    15

<210> 100
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone 1 from Table
      7.

<400> 100
```

```
Pro Pro Trp Arg Val
 1               5


<210> 101
<211> 15
<212> DNA
<213> Artificial Sequence


<220>
<223> The sequence of the BC loop of clone 2 from Table
      7.


<400> 101
ggtcagcgaa ctttt                                                    15


<210> 102
<211> 5
<212> PRT
<213> Artificial Sequence


<220>
<223> The sequence of the BC loop of clone 2 from Table
      7.


<400> 102
Gly Gln Arg Thr Phe
 1               5


<210> 103
<211> 15
<212> DNA
<213> Artificial Sequence


<220>
<223> The sequence of the FG loop of clone 2 from Table
      7.


<400> 103
aggcggtggt gggct                                                    15


<210> 104
<211> 5
<212> PRT
<213> Artificial Sequence


<220>
<223> The sequence of the FG loop of clone 2 from Table
      7.


<400> 104
Arg Arg Trp Trp Ala
 1               5


<210> 105
<211> 15
<212> DNA
<213> Artificial Sequence
```

```
<220>
<223> The sequence of the BC loop of clone 3 from Table
      7.

<400> 105
gcgaggtgga cgctt                                                    15

<210> 106
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the BC loop of clone 3 from Table
      7.

<400> 106
Ala Arg Trp Thr Leu
 1               5

<210> 107
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone 3 from Table
      7.

<400> 107
aggcggtggt ggtgg                                                    15

<210> 108
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> The sequence of the FG loop of clone 3 from Table
      7.

<400> 108
Arg Arg Trp Trp Trp
 1               5

<210> 109
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> A solubility tail.

<400> 109
Gly Lys Lys Gly Lys
 1               5

<210> 110
```

<211> 96
<212> PRT
<213> Artificial Sequence

<220>
<223> The synthetic Fn3 gene.

<400> 110
```
Met Gln Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr
1               5               10              15
Pro Thr Ser Leu Leu Ile Ser Trp Asp Ala Pro Ala Val Thr Val Arg
            20              25              30
Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln
        35              40              45
Glu Phe Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu
    50              55              60
Lys Pro Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Gly Arg
65              70              75              80
Gly Asp Ser Pro Ala Ser Ser Lys Pro Ile Ser Ile Asn Tyr Arg Thr
            85              90              95
```

<210> 111
<211> 308
<212> DNA
<213> Artificial Sequence

<220>
<223> The designed Fn3 gene.

<400> 111
```
catatgcagg tttctgatgt tccgcgtgac ctggaagttg ttgctgcgac cccgactagc    60
ctgctgatca gctgggatgc tcctgcagtt accgtgcgtt attaccgtat cacgtacggt   120
gaaaccggtg gtaactcccc ggttcaggaa ttcactgtac ctggttccaa gtctactgct   180
accatcagcg gcctgaaacc gggtgtcgac tataccatca ctgtatacgc tgttactggc   240
cgtggtgaca gcccagcgag ctccaagcca atctcgatta actaccgtac ctagtaactc   300
gaggatcc                                                            308
```

<210> 112
<211> 96
<212> PRT
<213> Artificial Sequence

<220>
<223> The designed Fn3 gene.

<400> 112
```
Met Gln Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr
1               5               10              15
Pro Thr Ser Leu Leu Ile Ser Trp Asp Ala Pro Ala Val Thr Val Arg
            20              25              30
Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln
        35              40              45
Glu Phe Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu
    50              55              60
Lys Pro Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Gly Arg
65              70              75              80
Gly Asp Ser Pro Ala Ser Ser Lys Pro Ile Ser Ile Asn Tyr Arg Thr
            85              90              95
```

```
<210> 113

<400> 113
 000

<210> 114
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> A fusion protein.

<400> 114
Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
 1               5                   10                  15
Arg Gly Ser His
            20

<210> 115
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> A sequence from clone Plb25.1.

<400> 115
Gly Gln Arg Thr Phe Arg Arg Trp Trp Ala
 1               5                   10

<210> 116
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> A sequence from clone Plb25.4.

<400> 116
Leu Arg Tyr Arg Ser Gly Trp Arg Trp Arg
 1               5                   10

<210> 117
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> A sequence from clone pLB24.1.

<400> 117
Cys Asn Trp Arg Arg Arg Ala Tyr Arg Tyr Trp Arg
 1               5                   10

<210> 118
<211> 12
<212> PRT
```

```
<213> Artificial Sequence

<220>
<223> A sequence from clone pLB24.3.

<400> 118
Ala Arg Met Arg Glu Arg Trp Leu Arg Gly Arg Tyr
 1               5                   10

<210> 119
<211> 4
<212> PRT
<213> Homo sapiens

<400> 119
Glu Ile Asp Lys
 1

<210> 120
<211> 4
<212> PRT
<213> Unknown

<220>
<223> Anti-hen egg lysozyme (HEL) antibody.

<400> 120
Arg Asp Tyr Arg
 1

<210> 121
<211> 96
<212> PRT
<213> Homo sapiens

<400> 121
Met Gln Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr
 1               5                   10                  15
Pro Thr Ser Leu Leu Ile Ser Trp Asp Ala Pro Ala Val Thr Val Arg
            20                  25                  30
Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln
            35                  40                  45
Glu Phe Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu
        50                  55                  60
Lys Pro Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Gly Arg
65                  70                  75                  80
Gly Asp Ser Pro Ala Ser Ser Lys Pro Ile Ser Ile Asn Tyr Arg Thr
                85                  90                  95
```

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